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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/520,391	09/16/2005	Mehmet Kutlugil	PHDL0900-001	5165
26948	7590	06/02/2006	EXAMINER	
ELLIS & VENABLE, PC 101 NORTH FIRST AVE. SUITE 1875 PHOENIX, AZ 85003			AMAYA, CARLOS DAVID	
			ART UNIT	PAPER NUMBER
			2836	

DATE MAILED: 06/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

H'A

Office Action Summary

Application No.

10/520,391

Applicant(s)

KUTLUGIL, MEHMET

Examiner

Carlos Amaya

Art Unit

2836

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09/16/2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) 3-9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 10 is/are rejected.
- 7) ☒ Claim(s) 3-9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 05/02/2005.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 3-9 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim must refer to the claims in the alternative only. See MPEP § 608.01(n). Accordingly, the claims 3-9 have not been further treated on the merits.
2. Claim 10 the phrase "existing the transistor" makes the claim indefinite. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Salisbury (US 5,548,481).

With respect to claim 1 Salisbury discloses an electronic switching module that can directly be mounted instead of the electromagnetic DC relays used in various vehicles without any modifications; which consists of a plastic casing (Protective cover 32, Figure 1) protecting said module against said external environmental conditions, an aluminum block (Salisbury discloses Column 4 lines 3-6 that a heat sink 12 is made of high thermal conductivity material, such as metal) preventing over-heating of the

Art Unit: 2836

electronic circuit, a semiconductor switching element transistor (Salisbury discloses high heat-producing components 38 and electrical components 28 are provided on the circuit board, these components maybe any heat producing or electrical components including a transistor), a printed circuit card (Printed circuit board 22) on which the electronic circuit element are arranged, a cover (a thermally conductive adhesive 34, where the circuit board is placed to transfer heat to the heat sink 12) wherein said printed circuit card is placed and the contacts (Connector assembly 52 and connector pins 44) to provide the connection to the power circuit.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Salisbury (US 5,548,481) in view of Cipolla (US 5,268,815)

With respect to claim 2 Salisbury in view of Cipolla discloses an electronic switching module according to Claim 1. Salisbury, however, does not disclose expressly a plastic casing provided with a row of perforations to allow heat transfer. Cipolla discloses (Cipolla inventions is being used only to show that perforations/apertures are provided on a casing for further assisting a heat sink) cover plates 34 and 36 to cover a circuit card 42; Cipolla discloses a plurality of apertures 22, for airflow into the system.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add perforations/apertures to a casing of an electronic.

The suggestion or motivation for doing so would have been to assist the cooling element in the electronic system by supplying airflow.

7. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bryan (US 6,891,705).

With respect to claim 10 Bryan discloses an electronic switching module characterized with an electronic circuit comprising the transistor (MOSFET Q1), wherein said module (Solid state relay 1) is used as a fuse by providing control on the current. It is an inherent property of transistors to provide controlled current to a load, thus the operation of the module where the transistor is housed will function as a fuse. Bryan, however, does not disclose expressly a resistance connected in parallel to the load.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a resistor in parallel with the a load, Bryan discloses a load 4 connect to MOSFET Q1 by means of a connector 2; thus one skill in the art would have added a resistor for the purpose of providing protection and for a better control of the power being supplied to the load.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to the examiner's supervisor, Brian Sircus who can be reached on (571)272-2058. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2836

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CA

Stephen W. Jackson
5-18-06
STEPHEN W. JACKSON
PRIMARY EXAMINER